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DATE MAILED: 12/13/2005

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/722,402		11/28/2003	Motonobu Hasegawa	000409-071	7176
21839	7590	12/13/2005		EXA	MINER
		RSOLL PC	TD 0 144 TWO	ROJAS,	BERNARD
(INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404				ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22313-1404				2832	_

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•	10/722,402	HASEGAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Bernard Rojas	2832				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONED	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 09/30	<u>//05</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims		•				
Claim(s) 1-4 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-4 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 30 September 2005 is/a Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti 11) ☐ The oath or declaration is objected to by the Ex-	re: a) $\square$ accepted or b) $\boxtimes$ object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa					
Paper No(s)/Mail Date	6) Other:	·				

#### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments filed 09/30/05 have been fully considered but they are not persuasive. Applicant drawings [figures 2-5] disclose a permanent magnet that is magnetized in the orientation disclosed by Odogaki et al. [US 4,660,010]. The North pole of the permanent magnet is on one radial edge while the South pole of the magnet is on another radial edge.

## Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "permanent magnet is magnetized in the radial direction of the rotation shaft so that a variation of magnetic flux by the permanent magnet interlinking to the coil becomes constant with respect to rotation of the permanent *magnetic* when the permanent magnet is rotated" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what Applicant limitation "with respect to rotation of the permanent magnetic when the permanent magnet is rotated" defines.

#### Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein Application/Control Number: 10/722,402

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4are rejected under 35 U.S.C. 103(a) as being unpatentable over Odogaki et al. [US 4,660,010] in view of Adler [US 4,242,004].

Claim 1, Odogaki et al. discloses a rotary solenoid apparatus [figure 2a] comprising: a rotation shaft [3], a regulating means [7, 8] for regulating the rotation range of the rotating shaft, a permanent magnet [10] fixed to the rotating shaft in a body, a spring [20] for urging the rotating shaft in the circumferential direction, a yoke [15] having a pair of stator portions being opposite to the permanent magnet with a predetermined clearance, a coil [17] wound on the yoke, an input [A] for a control current and, wherein the permanent magnet is magnetized in the radial direction of the rotation shaft [figure 2c].

Odogaki et al. fails to disclose an energization control means for controlling the energization of the coil so that the coil is selectively excited.

Adler teaches an actuator with an energization control means [41, 42, 43, figure 6] for selectively exciting the coil.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the energization control means, of Adler in order to facilitate the operation the rotary actuator of Odogaki et al.

Claim 2, Adler discloses a that the energization control means includes a switching element for controlling the energization of the coil [41] and a means for shorting [42, 43] between both ends of the coil so that current flows the same direction as the energization direction of the coil when the energization of the coil is interrupted [figure 6].

Claim 3, Adler discloses that the shorting means includes a diode [42] connecting both ends of the coil and allowing the current to flow in the same direction as the energization direction of the coil [col. 6 lines 5-16].

Claim 4, Odogaki et al. discloses that the stator portions are positioned opposite to the permanent magnet with a predetermined clearance and are positioned outwardly of the permanent magnet in the radial direction [figure 2a].

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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